"Synergistic Improvements to Polynucleotide Vaccines" 09/828,505 Eyal Raz, et al.

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FIG. 1

Construct of Amb a1 cDNA - II

բ այլ և	ength Amb a1 (396 codon)
Fun-10	ength Amb at (390 codon)
Plant Leader Seque	nce (36AA)
	∆36 Amb a1
	ssHA∆36 Amb a1
Virus Leader Seque	(1444)

CAT

CAC

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FIG. 2

Comparison of codon usage (Plant vs. Human)

HIS

Plant

Human			
n۰			
0%			

100%

GLN

	Plant	Human
CAA	90%	30%
CAG	10%	70%

ASP

	Plant	Human
GAT	76%	31%
GAC	24%	69%

83%

17%

GLU

	Plant	Human
GAA	69%	25%
GAG	31%	75%

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FIG. 3

Expression of Amb a1 in COS-7 cell - III

43 kDay 39 kDa 38 kDa/

1: Purified AgE

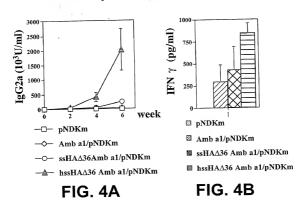
2: Amb a1/pNDKm (x1)

3: $\Delta 36$ Amb a1/pNDKm (x3)

4: ssHA\(\Delta\)36Amb a1/pNDKm (x3)

5: hssHA\(\Delta\)36Amb a1/pNDKm (x10)

Induction of Antigen-specific Antibody and Cytokine *in vivo* - III



Induction of Antigen-specific Antibody and Cytokine in vivo - VI

(Co-injection of ISS-ODN with 50µg of hssHA\(Delta\)36Amb a1/pNDKm)

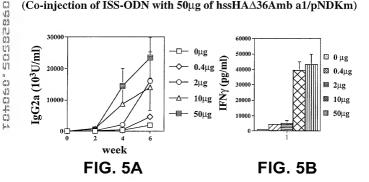
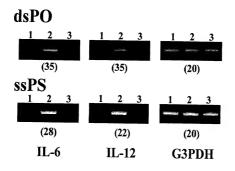


FIG. 6

In vivo Efficacy of ISS-ODN (dsPO vs. ssPS)



1: PBS, 2: ISS-ODN, 3: M-ODN

- Injection of ISS-ODN(i.v.) [200µg/mouse]
- Isolation of spleen after 2 hr post-injection
- · Isolation of mRNA
- Detection of IL-6/IL-12 transcript by RT-PCR

Reduction of Amb a1-specific IgE in vivo (week 8)

